

Atty. Docket No. CPAC 1041-2
Appl. No. 10/618,933

PATENT

Remarks

Claims 1 - 58 are in the application. Claims 56 - 58 having been withdrawn previously as being directed to a non-elected invention, claims 1 - 55 are now under consideration in the application, and are now made subject to a Requirement for Election of Species.

Response to Requirement for Election of Species

Restriction was required to one of:

"Species of multi-package module:

A1. A multi-package module with a memory package stacked adjacent or partly to one side of the processor (Figs. 5C, 6C, 8, 9 and 11).

A2. A multi-package module with a memory package stacked over a portion of the processor (Fig. 4C)."

"... species of type of processors:

B1. A processor comprising a CPU.

B2. A processor comprising a GPU.

B3. A processor comprising a ASIC."

"... species of arrangement of memory package stack:

C1. A memory package stack with a first package on a first and second side of a package stack substrate (Fig. 3).

C2. A memory package stack without a first package on a first and second side of a package stack substrate (Fig. 7)."

"... species of type of first package:

D1. A first package that is a BGA package.

D2. A first package that is a LGA package."

If D2 is elected, "... species LGA package:

E1. A LGA package with spacers (Fig. 7).

E2. A LGA package without spacers (Fig. 10)."

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Applicant thanks the Examiner for replacing the earlier Election Requirement with this clearer one.

Some question remains regarding the distinction between E1 and E2. Fig. 10 shows an embodiment having a stacked die LGA package, having one rectangular die stacked over another rectangular die, in a "crossed die" arrangement, for example. Fig. 7 shows an embodiment in which one LGA package is stacked over another LGA package, with a spacer between the packages. That is, Fig. 7 shows a package stack, and Fig. 10 shows a stacked die package. Applicant has attempted to make an election according to this understanding of the choice of species E1 and E2.

Applicants elect to prosecute species [A1, B2, C2, D2, E1] in this application.

Claims 1 - 3, 6, 8, 10, 11 - 13, 15 - 21, 25 - 28, 29 - 31, 34, 36, 38, 39 - 45, 49 - 53, 54, 55, 56 - 58 are believed to read on the elected Species. A list of claims follows:

1, 2, 3, 6, 8, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 31, 34, 36, 38, 39, 40, 41, 42, 43, 44, 45, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58.

Claims 1, 11, 16 - 24, 29, 40 - 45, 54 and 55 were deemed generic.

This reply is being filed within the one month's shortened statutory period set by the Examiner for response and, accordingly, no extension of time or fee is required in connection with the filing of this paper.

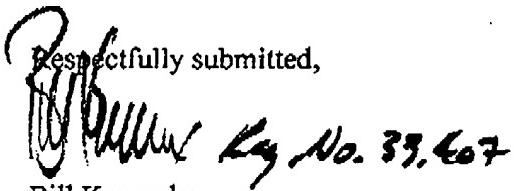
All the claims in the application are believed to be in condition for allowance, and action to that effect is respectfully requested.

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If the Examiner determines that a conference would facilitate prosecution of this application, the Examiner is invited to telephone Applicant's representative, undersigned, at the telephone number set out below.

Respectfully submitted,


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